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APPLICATION NO.	FILING DATE	FIRST NAMED INVENTOR	ATTORNEY DOCKET NO.	CONFIRMATION NO.
09/753,728	01/03/2001	Makoto Araki	1232-4672	3779

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EXAMINER

MEINECKE DIAZ, SUSANNA M

ART UNIT	PAPER NUMBER
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3623

DATE MAILED: 03/25/2005

Please find below and/or attached an Office communication concerning this application or proceeding.

Office Action Summary

Application No.

09/753,728

Applicant(s)

ARAKI ET AL.

Examiner

Susanna M. Diaz

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-- The MAILING DATE of this communication appears on the cover sheet with the correspondence address --
Period for Reply

A SHORTENED STATUTORY PERIOD FOR REPLY IS SET TO EXPIRE 3 MONTH(S) FROM THE MAILING DATE OF THIS COMMUNICATION.

- Extensions of time may be available under the provisions of 37 CFR 1.136(a). In no event, however, may a reply be timely filed after SIX (6) MONTHS from the mailing date of this communication.
- If the period for reply specified above is less than thirty (30) days, a reply within the statutory minimum of thirty (30) days will be considered timely.
- If NO period for reply is specified above, the maximum statutory period will apply and will expire SIX (6) MONTHS from the mailing date of this communication.
- Failure to reply within the set or extended period for reply will, by statute, cause the application to become ABANDONED (35 U.S.C. § 133). Any reply received by the Office later than three months after the mailing date of this communication, even if timely filed, may reduce any earned patent term adjustment. See 37 CFR 1.704(b).

Status

- 1) ☒ Responsive to communication(s) filed on 21 December 2004.
- 2a) ☐ This action is **FINAL**. 2b) ☒ This action is non-final.
- 3) ☐ Since this application is in condition for allowance except for formal matters, prosecution as to the merits is closed in accordance with the practice under *Ex parte Quayle*, 1935 C.D. 11, 453 O.G. 213.

Disposition of Claims

- 4) ☒ Claim(s) 1-89 is/are pending in the application.
- 4a) Of the above claim(s) 5,19,27,41 and 49-87 is/are withdrawn from consideration.
- 5) ☐ Claim(s) _____ is/are allowed.
- 6) ☒ Claim(s) 1-4,6-18,20-26,28-40,42-48,88 and 89 is/are rejected.
- 7) ☐ Claim(s) _____ is/are objected to.
- 8) ☐ Claim(s) _____ are subject to restriction and/or election requirement.

Application Papers

- 9) ☒ The specification is objected to by the Examiner.
- 10) ☒ The drawing(s) filed on 03 January 2001 is/are: a) ☒ accepted or b) ☐ objected to by the Examiner.
Applicant may not request that any objection to the drawing(s) be held in abeyance. See 37 CFR 1.85(a).
Replacement drawing sheet(s) including the correction is required if the drawing(s) is objected to. See 37 CFR 1.121(d).
- 11) ☐ The oath or declaration is objected to by the Examiner. Note the attached Office Action or form PTO-152.

Priority under 35 U.S.C. § 119

- 12) ☒ Acknowledgment is made of a claim for foreign priority under 35 U.S.C. § 119(a)-(d) or (f).
- a) ☐ All b) ☐ Some * c) ☒ None of:
1. ☒ Certified copies of the priority documents have been received.
2. ☐ Certified copies of the priority documents have been received in Application No. _____.
3. ☐ Copies of the certified copies of the priority documents have been received in this National Stage application from the International Bureau (PCT Rule 17.2(a)).
- * See the attached detailed Office action for a list of the certified copies not received.

Attachment(s)

- 1) ☒ Notice of References Cited (PTO-892)
- 2) ☐ Notice of Draftsperson's Patent Drawing Review (PTO-948)
- 3) ☒ Information Disclosure Statement(s) (PTO-1449 or PTO/SB/08)
Paper No(s)/Mail Date See attachment.
- 4) ☐ Interview Summary (PTO-413)
Paper No(s)/Mail Date. _____.
- 5) ☐ Notice of Informal Patent Application (PTO-152)
- 6) ☐ Other: _____.

IDS Mail Dates: 3/11/03; 8/21/03; 8/22/03; 3/5/04; 6/25/04; 1/24/05; 2/15/05

DETAILED ACTION

1. This Non-Final Office action is responsive to Applicant's election filed December 21, 2004.

Applicant elects Species I with traverse, stating that "there is no serious search burden if all the claims are examined" (page 2 of Applicant's election); however, Applicant provides no support for such an assertion. The Examiner maintains that there would be a serious search burden if all claims were examined; therefore, the restriction is maintained.

Claims 5, 19, 27, 41, and 49-87 stand as withdrawn.

Claims 1-4, 6-18, 20-26, 28-40, 42-48, 88, and 89 are presented for examination.

Priority

2. Acknowledgment is made of applicant's claim for foreign priority based on an application filed in Japan on January 6, 2000 and another application filed in Japan on October 26, 2000. It is noted, however, that applicant has not filed a certified copy of either application as required by 35 U.S.C. 119(b).

Specification

3. Applicant is reminded of the proper language and format for an abstract of the disclosure.

The abstract should be in narrative form and generally limited to a single paragraph on a separate sheet within the range of 50 to 150 words. It is important that the abstract not exceed 150 words in length since the space provided for the abstract on the computer tape used by the printer is limited. The form and legal phraseology often used in patent claims, such as "means" and "said," should be avoided. The abstract should describe the disclosure sufficiently to assist readers in deciding whether there is a need for consulting the full patent text for details.

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The language should be clear and concise and should not repeat information given in the title. It should avoid using phrases which can be implied, such as, "The disclosure concerns," "The disclosure defined by this invention," "The disclosure describes," etc.

4. The abstract of the disclosure is objected to because it includes the term "means." Correction is required. See MPEP § 608.01(b).

Claim Objections

5. Claim 48 is objected to because of the following informalities:

Claim 48, line 2, delete "continuos", insert --continuous--

Appropriate correction is required.

Claim Rejections - 35 USC § 101

6. 35 U.S.C. 101 reads as follows:

Whoever invents or discovers any new and useful process, machine, manufacture, or composition of matter, or any new and useful improvement thereof, may obtain a patent therefor, subject to the conditions and requirements of this title.

7. Claims 23-26, 28-40, and 42-44 are rejected under 35 U.S.C. 101 because the claimed invention is directed to non-statutory subject matter.

The basis of this rejection is set forth in a two-prong test of:

- (1) whether the invention is within the technological arts; and
- (2) whether the invention produces a useful, concrete, and tangible result.

For a claimed invention to be statutory, the claimed invention must be within the technological arts. Mere ideas in the abstract (i.e., abstract idea, law of nature, natural phenomena) that do not apply, involve, use, or advance the technological arts fail to

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promote the "progress of science and the useful arts" (i.e., the physical sciences as opposed to social sciences, for example) and therefore are found to be non-statutory subject matter. For a process claim to pass muster, the recited process must somehow apply, involve, use, or advance the technological arts.

Mere intended or nominal use of a component, albeit within the technological arts, does not confer statutory subject matter to an otherwise abstract idea if the component does not apply, involve, use, or advance the underlying process.

In the present case, while claims 23-26, 28-40, 42, and 43 recite a useful, concrete, and tangible result, they are not limited to the technological arts. The display of data is, at best, a nominal recitation of technology (assuming that the display is an electronic display, which is not expressly recited). Technology must effect a core step of the invention, such as a calculation or analysis step.

Claim 44 fails to recite that the program codes are executable and is therefore interpreted as software *per se*, which is non-statutory subject matter.

Appropriate correction is required.

Claim Rejections - 35 USC § 112

8. The following is a quotation of the first paragraph of 35 U.S.C. 112:

The specification shall contain a written description of the invention, and of the manner and process of making and using it, in such full, clear, concise, and exact terms as to enable any person skilled in the art to which it pertains, or with which it is most nearly connected, to make and use the same and shall set forth the best mode contemplated by the inventor of carrying out his invention.

9. Claims 1-4, 6-18, 20-26, 28-40, 42-48, 88, and 89 are rejected under 35

U.S.C. 112, first paragraph, as failing to comply with the written description requirement.

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The claim(s) contains subject matter which was not described in the specification in such a way as to reasonably convey to one skilled in the relevant art that the inventor(s), at the time the application was filed, had possession of the claimed invention.

Throughout the claims, Applicant recites “work standards.” The specification states, “A ‘work standard’ represents a certain work unit in the manufacturing process.” (Page 35 of the specification) First, it is not clear whether the fact that the work standard *represents* a certain work unit signifies that the work standard is defined as a certain work unit or whether it is merely related to or acts on behalf of a certain work unit. In other words, it is not clear that the Applicant has provided a special definition for “work standard.” Second, the ordinary meaning of a “standard” is “something established by authority, custom, or general consent as a model or example” (Merriam Webster’s Collegiate® Dictionary (10th ed)); therefore, a work standard would be something established by authority, custom, or general consent as a model or example in relation to work. This definition does not seem consistent with the usage of “work standard,” as set forth in the claims.

The term “composition targets” is recited throughout the claims. It is not clear what “composition targets” are, especially in terms of “displaying names of the plurality of work standards as composition targets,” as recited in claims 1, 23, and 44. Page 3 of the specification states that “each of the plurality of work standards as the composition targets has manhour value data.” Are the composition targets themselves a measure of

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manhours? If so, do they refer to a target efficiency of a machine or operator?

Alternatively, do they refer to a target length of time to perform a task?

Also unclear is the term "composition condition" (which is recited throughout the claims). Page 3 of the specification states, "For simple division, the composition condition is preferably an average value of manhours necessary to execute all the work standards in the station." Since the composition condition is only *preferably* an average value of manhours necessary to execute all the work standards in the station, it appears that the "composition condition" is not limited to this definition. This observation is further supported by the fact that dependent claims 3, 25, 88, and 89 (which must further limit claims from which they depend, i.e., claims 1, 2, 23, and 24) specifically limit the composition condition to such an interpretation. What would be the more broad interpretation of a "composition condition"? Also, how is the composition condition specifically used to divide the work standards among the plurality of stations? Additionally, what is the relationship, if any, between the composition targets and the composition condition? Page 3 of the specification states, "For simple division, the composition condition is preferably an average value of manhours necessary to execute all the work standards in the station. According to another preferred aspect of the present invention, each of the plurality of work standards as the composition targets has manhour value data." By relating the composition targets to "another preferred aspect of the present invention," does this imply that the composition targets are used in a separate embodiment than the composition condition? If used together, the relationship between the two should be clarified.

Since the specification does not provide adequate written disclosure regarding “work standards,” “composition targets,” and “composition condition,” the claims are rejected as containing subject matter which was not described in the specification in such a way as to reasonably convey to one skilled in the relevant art that the inventors, at the time the application was filed, had possession of the claimed invention.

10. The following is a quotation of the second paragraph of 35 U.S.C. 112:

The specification shall conclude with one or more claims particularly pointing out and distinctly claiming the subject matter which the applicant regards as his invention.

11. Claims 1-4, 6-18, 20-26, 28-40, 42-48, 88, and 89 are rejected under 35 U.S.C. 112, second paragraph, as being indefinite for failing to particularly point out and distinctly claim the subject matter which applicant regards as the invention.

Where applicant acts as his or her own lexicographer to specifically define a term of a claim contrary to its ordinary meaning, the written description must clearly redefine the claim term and set forth the uncommon definition so as to put one reasonably skilled in the art on notice that the applicant intended to so redefine that claim term. *Process Control Corp. v. HydReclaim Corp.*, 190 F.3d 1350, 1357, 52 USPQ2d 1029, 1033 (Fed. Cir. 1999). Throughout the claims, Applicant recites “work standards.” The specification states, “A ‘work standard’ represents a certain work unit in the manufacturing process.” (Page 35 of the specification) First, it is not clear whether the fact that the work standard *represents* a certain work unit signifies that the work standard is defined as a certain work unit or whether it is merely related to or acts on behalf of a certain work unit. In other words, it is not clear that the Applicant has

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provided a special definition for "work standard." Second, the ordinary meaning of a "standard" is "something established by authority, custom, or general consent as a model or example" (Merriam Webster's Collegiate® Dictionary (10th ed)); therefore, a work standard would be something established by authority, custom, or general consent as a model or example in relation to work. This definition does not seem consistent with the usage of "work standard," as set forth in the claims. In conclusion, the intended definition of "work standard" is not clearly set forth in the specification or claims, thereby rendering the term and the claimed invention vague and indefinite.

The term "composition targets" is recited throughout the claims. It is not clear what "composition targets" are, especially in terms of "displaying names of the plurality of work standards as composition targets," as recited in claims 1, 23, and 44. Page 3 of the specification states that "each of the plurality of work standards as the composition targets has manhour value data." Are the composition targets themselves a measure of manhours? If so, do they refer to a target efficiency of a machine or operator? Alternatively, do they refer to a target length of time to perform a task?

Also unclear is the term "composition condition" (which is recited throughout the claims). Page 3 of the specification states, "For simple division, the composition condition is preferably an average value of manhours necessary to execute all the work standards in the station." Since the composition condition is only *preferably* an average value of manhours necessary to execute all the work standards in the station, it appears that the "composition condition" is not limited to this definition. This observation is further supported by the fact that dependent claims 3, 25, 88, and 89 (which must

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further limit claims from which they depend, i.e., claims 1, 2, 23, and 24) specifically limit the composition condition to such an interpretation. What would be the more broad interpretation of a "composition condition"? Also, how is the composition condition specifically used to divide the work standards among the plurality of stations?

Additionally, what is the relationship, if any, between the composition targets and the composition condition? Page 3 of the specification states, "For simple division, the composition condition is preferably an average value of manhours necessary to execute all the work standards in the station. According to another preferred aspect of the present invention, each of the plurality of work standards as the composition targets has manhour value data." By relating the composition targets to "another preferred aspect of the present invention," does this imply that the composition targets are used in a separate embodiment than the composition condition? If used together, the relationship between the two should be clarified.

Claims 6 and 28 recite "selecting the plurality of work standards as the composition targets from the displayed work standard group." Is "work standards as the composition targets" merely a label for one type of selectable item or are specific work standards being set in relation to composition targets?

There is no antecedent basis for "the composition result" in claims 13-15 and 35-37 and it is not readily apparent what "the composition result" refers to.

There is no antecedent basis for "the composition result output" in claims 15 and 37 and it is not readily apparent what "the composition result output" refers to.

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Claims 16, 17, 38, and 39 recite that a station may be corrected by "adding an arbitrary station to the station." How does one add a physical station to another station? Also, does the fact that the station is arbitrary mean that it is randomly selected?

Claims 18 and 40 refer to "authenticating a user who does composition." Does "composition" merely refer to the act of assigning work? It is not clear what the metes and bounds of "composition" are.

Claims 20 and 42 recite that "a width of the bar graph is increased to limit a height of the bar graph." The metes and bounds of this limitation are unclear. How does the width limit the height? How is the limit determined? Does the ratio between the width and height represent any specific aspect of the total manhour of the work standard?

The metes and bounds of claim 22 are ambiguous since it is unclear which limitations are meant to be incorporated from claim 1.

Claim 44 is an improper dependent claim since it fails to further limit claim 23 and is directed toward a different statutory class than claim 23. Please rewrite claim 44 as an independent claim.

Claims 45-48 seem to interchange the terms "works" and "work standards." Are these terms meant to be synonymous with one another? If not, how are they related (i.e., what is the difference between the scope of the two terms)?

Appropriate correction and/or clarification is required.

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Because claims 1-4, 6-18, 20-26, 28-40, 42-48, 88, and 89 are so indefinite, no art rejection is warranted as substantial guesswork would be involved in determining the scope and content of these claims. See In re Steele, 305 F.2d 859, 134 USPQ 292 (CCPA 1962); Ex parte Brummer, 12 USPQ 2d, 1653, 1655 (BdPatApp&Int 1989); and also In re Wilson, 424 F.2d 1382, 165 USPQ 494 (CCPA 1970). Prior art pertinent to the disclosed invention is nevertheless cited and applicants are reminded they must consider all cited art under Rule 111(c) when amending the claims to conform with 35 U.S.C. § 112.

Conclusion

12. The prior art made of record and not relied upon is considered pertinent to applicant's disclosure.

Yuri et al. (U.S. Patent No. 6,249,715) -- Discloses a method and apparatus for optimizing work distribution along an assembly line or in a production process.

Rentschler et al. (U.S. Patent No. 5,177,688) -- Discloses a method for balancing an assembly line.

Tanaka et al. (U.S. Patent No. 5,615,138) -- Discloses a method for establishing the working mantime in a production line.


13. Any inquiry concerning this communication or earlier communications from the examiner should be directed to Susanna M. Diaz whose telephone number is (703) 305-1337. The examiner can normally be reached on Monday-Friday, 9 am - 5:30 pm.

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If attempts to reach the examiner by telephone are unsuccessful, the examiner's supervisor, Tariq Hafiz can be reached on (703) 305-9643. The fax phone number for the organization where this application or proceeding is assigned is 703-872-9306.

Information regarding the status of an application may be obtained from the Patent Application Information Retrieval (PAIR) system. Status information for published applications may be obtained from either Private PAIR or Public PAIR. Status information for unpublished applications is available through Private PAIR only. For more information about the PAIR system, see <http://pair-direct.uspto.gov>. Should you have questions on access to the Private PAIR system, contact the Electronic Business Center (EBC) at 866-217-9197 (toll-free).

March 19, 2005


SUSANNA M. DIAZ
PRIMARY EXAMINER
AU 3623